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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/467,986	12/21/1999	AKIHIKO NAKAZAWA	35.C14120	3093

§514 7590 10/20/2003

FITZPATRICK CELLA HARPER & SCINTO  
30 ROCKEFELLER PLAZA  
NEW YORK, NY 10112

EXAMINER

FERGUSON, LAWRENCE D

ART UNIT	PAPER NUMBER
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1774

DATE MAILED: 10/20/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

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<b>Office Action Summary</b>	<b>Application No.</b>		<b>Applicant(s)</b>	
	09/467,986		NAKAZAWA ET AL.	
	<b>Examiner</b>		<b>Art Unit</b>	
	Lawrence D Ferguson		1774	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 8/6/03.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-3,5,10-13 and 30 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3,5,10-13 and 30 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                             | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____  |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)         | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ | 6) <input type="checkbox"/> Other: _____                                    |

**DETAILED ACTION**

***Response to Amendment***

1. This action is in response to the amendment mailed August 6, 2003.

Claim 9 was canceled and claims 1 and 30 were amended, rendering claims 1-3, 5, 10-13 and 30 pending.

***Claim Rejections – 35 USC 103(a)***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-3, 5, 10-13 and 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sypula et al. (U.S. 5,525,446) in view of Mitsubishi (JP 4255332). Sypula discloses an intermediate transfer member for an electrostatographic imaging system (column 2, lines 10-12) where a toner image is formed on an image forming device and transferred to the intermediate transfer member and then a receiving substrate (photosensitive member) (column 2, lines 24-31). Sypula discloses the member can be in the form of an endless belt (column 2, lines 55-56) where polycarbonate resins employed as the bottom layer of the intermediate transfer member (column 2, lines 62-63) including 4,4'-dihydroxy-diphenyl-sulphone and the like (column

3, lines 14-15) which comprise conductive materials (column 3, lines 60-65). Sypula discloses a resistivity about  $10^{10}$  ohm-cm (column 6, lines 21-22) and a surface resistivity of the film base layer of intermediate transfer member is greater than  $10^7$  ohms/square (column 15, lines 8-10). Sypula discloses the intermediate transfer member has a thickness of about 200 $\mu$ m (column 16, line 5). Sypula discloses an extrusion process where a die tool is prepared from metal hardware with an extrusion slot that has the width and thickness dimensions of the film (column 4, lines 33-36). Sypula discloses the polycarbonate plastic compound is extruded through the die tool after being melted (column 4, lines 40-41). Applicant amends claim 1 to include the claim language 'use in an electrophotographic apparatus' which is an intended use. A recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim. In a claim drawn to a process of making, the intended use must result in a manipulative difference as compared to the prior art. See *In re Casey*, 152 USPQ 235 (CCPA 1967) and *In re Otto*, 136 USPQ 458, 459 (CCPA 1963). Additionally, the claim language, 'transferred by applying a first transfer bias and from which the toner image is transferred to an image-receiving material by applying a second transfer bias' and 'process comprising the steps of: providing an extrusion material having a breaking extension of 2% or more and a tensile breaking strength of 40Mpa or more...subjecting the extruded resin to a scale-up inflation by air blowing or drawing the extruded resin by applying tension and forming a

seamless belt having a thickness not larger than 1/3 of the slit width' introduces a process limitation to the product claim. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process." In re Thorpe, 777 F.2d 695, 698, 227 USPQ 964, 966. Further, process limitations are given no patentable weight in product claims. Additionally, in instant amended claim 30, the phrase 'means for transferring a toner image formed on the photosensitive member to the endless belt under an application of a first transfer bias...to an image-receiving material under an application of a second transfer bias' also introduces a process limitation to the product claim, which is given little patentable weight in a product claim.

Although Sypula does not explicitly teach a thickness not larger than 1/5 of the slit width, thickness is an optimizable feature. With regard to the limitation of the thickness, absent a showing of unexpected results, it is obvious to modify the conditions of a composition because they are merely the result of routine experimentation. The experimental modification of prior art in order to optimize operation conditions (e.g. thickness) fails to render claims patentable in the absence of unexpected results. Thickness is optimizable as they directly affect the durability of the belt member. As such, it is optimizable. It would have been obvious to one of ordinary skill in the art to make the belt member with the limitations of the thickness since it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art. *In re Boesch*, 617 USPQ 215 (CCPA 1980).

***Response to Arguments***

4. Applicant's arguments to 35 USC 103(a) being unpatentable over Sypula et al. (U.S. 5,525,446) in view of Mitsubishi (JP 4255332) have been fully considered and has been withdrawn. Claims are maintained as rejected under 35 USC 103(a) over Sypula et al. (U.S. 5,525,446). Applicant argues the endless belt can be used in an electrophotographic apparatus. This is directed to intended use. A recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim. In a claim drawn to a process of making, the intended use must result in a manipulative difference as compared to the prior art. See *In re Casey*, 152 USPQ 235 (CCPA 1967) and *In re Otto*, 136 USPQ 458, 459 (CCPA 1963). Applicant argues Sypula does not disclose a base layer is produced through a process step. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process." In *re Thorpe*, 777 F.2d 695, 698, 227 USPQ 964, 966. Further, process limitations are given no patentable weight in product claims. Applicant maintains that Sypula does not recognize the problem of the present invention or the method of forming the presently claimed invention. As mentioned earlier, if the prior art structure is capable of performing the intended use, then it meets the claim. Because Sypula contains the same material as the instantly claimed invention, it is capable of being used for the same purpose. Additionally, process limitations are given no patentable weight in product claims. Applicant indicates comparative examples show unexpected results over the presently claimed invention. The comparative examples do not

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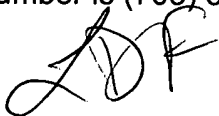
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overcome the rejection of Sypula. Applicant has not shown that the Sypula reference intermediate belt cannot show the claimed features.

**Conclusion**

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lawrence Ferguson whose telephone number is (703) 305-9978. The examiner can normally be reached on Monday through Friday 8:30 AM – 4:30PM. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cynthia Kelly can be reached on (703) 308-0449. Please allow the examiner twenty-four hours to return your call.

The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9310 for regular communications and (703) 872-9311 for After Final communications. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-2351.



Lawrence D. Ferguson  
Examiner  
Art Unit 1774

CYNTHIA H. KELLY  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 1700

